

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 04-107974

(43)Date of publication of application : 09.04.1992

(51)Int.Cl.

H01S 3/094

G02F 1/35

H01S 3/07

H01S 3/25

(21)Application number : 02-227206

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(22)Date of filing : 28.08.1990

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## (54) PUMPING LIGHT SOURCE

### (57)Abstract:

**PURPOSE:** To enable reliability to be improved and cost to be reduced by connecting a forward light and a backward light which are emitted by a plurality of laser diodes to a light-coupling equipment for forming a pumping light.

**CONSTITUTION:** Backward light of LD 1, 2, 3,... is divided by branching filter 16, 17, 18..., approximately 1/10 of the backward light is fed to monitors 19, 20, and 21, approximately 9/10 is fed to a light-coupling equipment 10, it is connected with the forward light of the LD 1, 2, 3,... by the light-coupling equipment 10, and the output of the light-coupling equipment 10 becomes a pumping light. As a result, the number of LDs of pumping light source becomes approximate 1/2. Although only one more branching filter is needed for one LD as compared with before, the branching filter is inexpensive as compared with the LD and has an improved reliability so that the pumping light source becomes inexpensive and highly reliable even considering the branching filter.

